

VELOCITY INDUCED CATALYZED CAVITATION PROCESS FOR TREATING AND CONDITIONING FLUIDS

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ABSTRACT OF THE DISCLOSURE

The present invention provides an apparatus and a method for a catalytic cavitation reactor comprising an inner pipe having a wall with plurality of spaced apart radially bored inner pipe holes located thereon. A second pipe having a wall with plurality of spaced apart radially bored second pipe holes is also provided. The inner pipe is located within and joined to the second pipe. Within 10 the interior of the second and out pipes are lengths of static mixing baffles. An outer pipe is also provided. The second pipe is located within and joined to the outer pipe. Within the interior of the second and out pipes are lengths of static mixing baffles. A plurality of nozzles are provided wherein each of the inner pipe holes and second pipe holes receives one of the plurality of nozzles. Each of the plurality of nozzles has an inlet end, an outlet end and a constriction therebetween. A 15 catalytically active zone is formed between the constriction and the outlet end.